

# STEM IN THE APPALACHIA REGION

## Eighth Grade Student Interest in Mathematics

### WHY STEM?

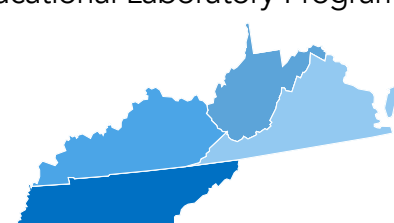
Science, technology, engineering and mathematics (STEM) education continues to be closely aligned to the nation's economic prosperity. STEM education helps students develop necessary critical thinking, problem solving, reasoning, and employability skills (e.g., communication, teamwork, organization) to successfully enter the workforce.<sup>4, 8, 10, 11</sup>

### STUDENT INTEREST

Subject-specific interest is one of many determinants of student learning and achievement.<sup>3, 7, 13</sup> Studies have shown that student interest in a subject (e.g. I like math, I think math is fun) can facilitate student motivation for learning and strong skills in that subject. For example, choosing courses of interest at higher grades or the development of strong math skills.<sup>7, 5</sup>

### THE REGION

Appalachia refers to Kentucky, Tennessee, Virginia, and West Virginia as defined by the U.S. Department of Education's Institute of Education Sciences' Regional Educational Laboratory Program.

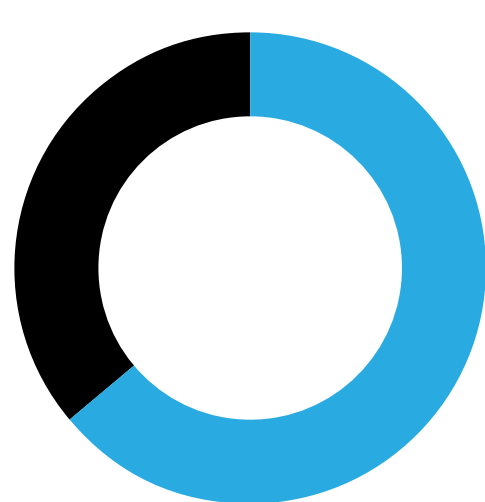


### THE "M" IN STEM

Researchers posit that mathematical ideas and concepts are the technical foundation for other STEM subjects.<sup>1, 2, 6, 9, 12</sup>

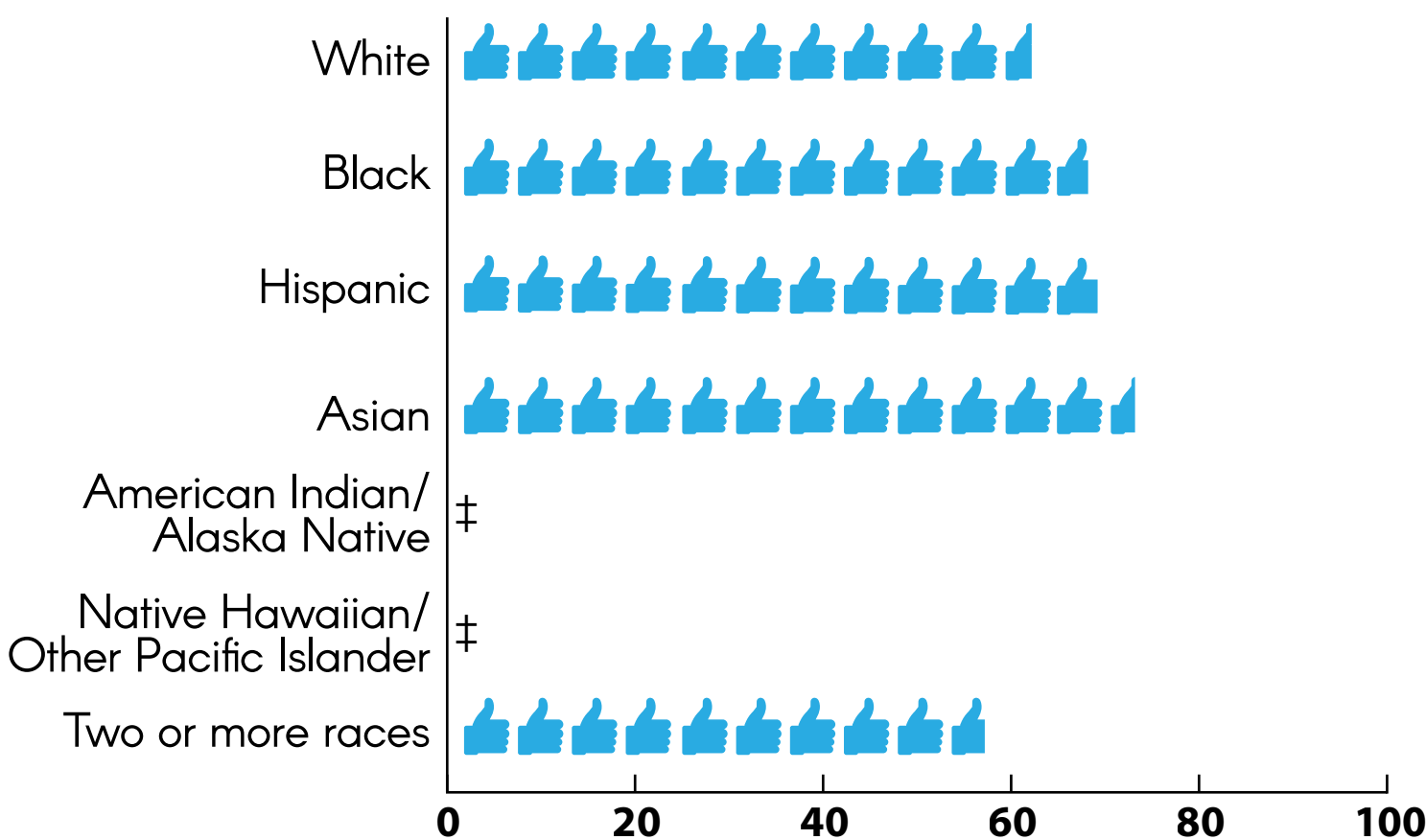
Eighth grade students report interest in mathematics across racial/ethnic student groups.

## I LIKE MATH



**64%**

of eighth graders in the Appalachia region reported that **they like math.**

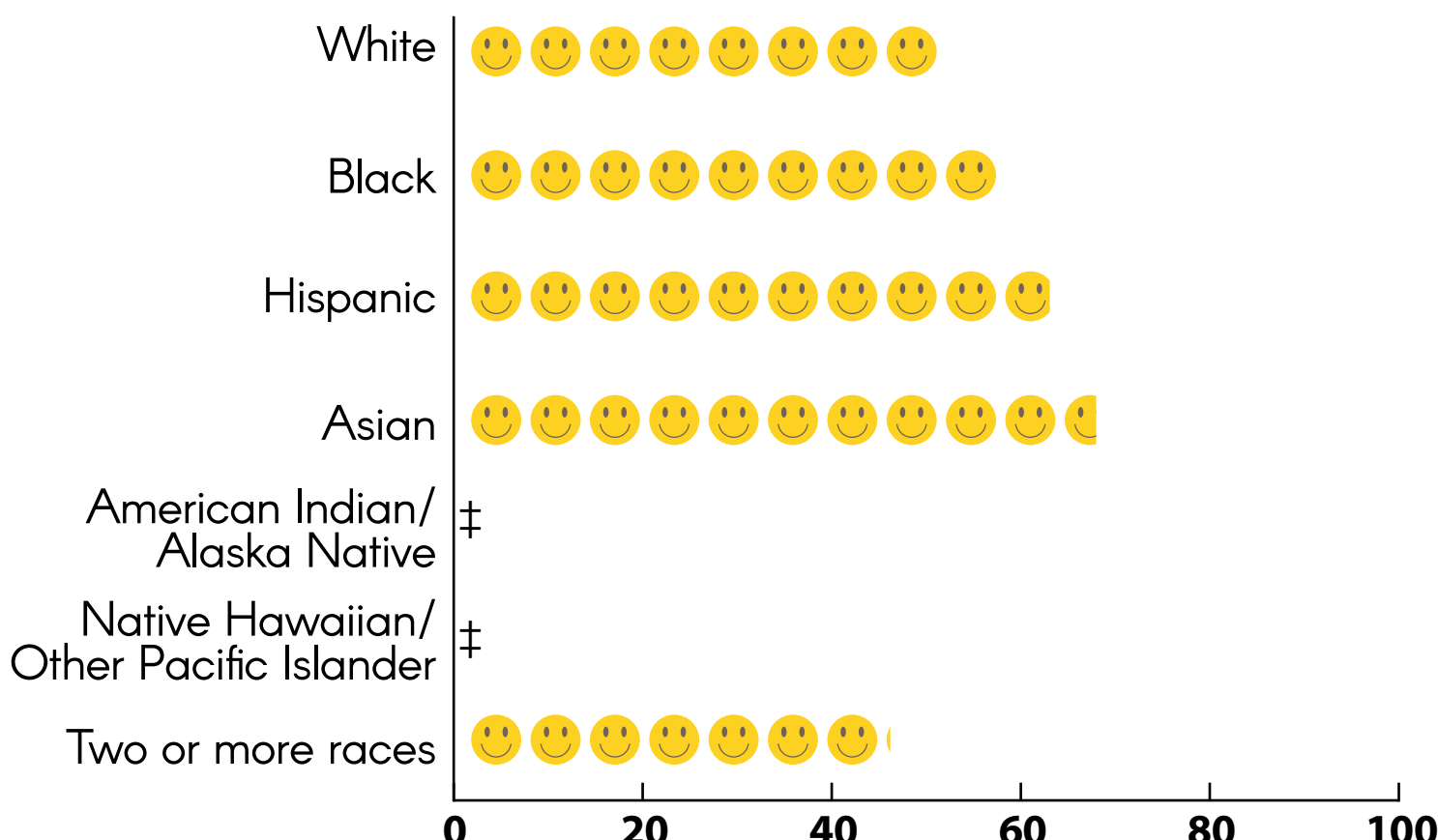


## MATH IS FUN



**54%**

of eighth graders in the Appalachia region reported that **math is fun.**



± Reporting Standards not met.

NOTE: Respondents were asked to indicate how much they disagree or agree with the following statements: "I like mathematics" and "Mathematics is fun". Respondents could answer: "Strongly disagree," "Disagree," "Agree," or "Strongly agree." The responses "Agree" and "Strongly agree" have been combined for estimates of "I like mathematics" and "Mathematics is fun".

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Mathematics Assessment.

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